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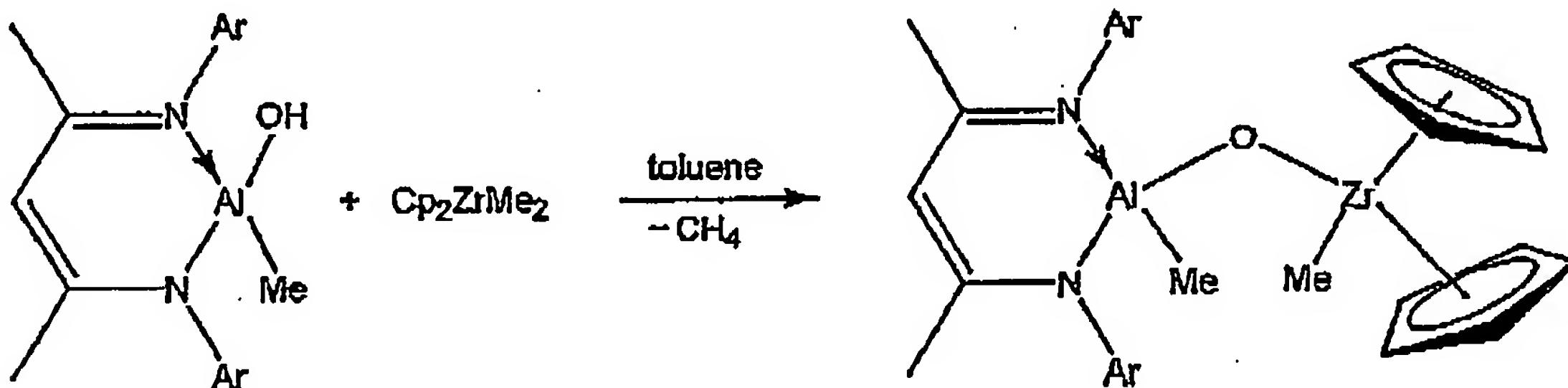
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(54) Title: OXYGEN-BRIDGED BIMETALLIC COMPLEX, THE PRODUCTION THEREOF AND ITS UTILIZATION FOR POLYMERIZATION CATALYSIS

(54) Bezeichnung: SAUERSTOFFVERBRÜCKTER BIMETALLISCHER KOMPLEX, DESEN HERSTELLUNG UND VERWENDUNG FÜR DIE POLYMERISATIONS-KATALYSE



(57) Abstract: The binuclear, oxygen-bridged, hetero-bimetallic complexes of general formula $[(LM^1R^1)(Cp_2M^2R^2)]\mu\text{-O}$ are suitable as polymerization catalysts for olefin polymerization. ($M^1 = \text{Al, Ge, Zr or Ti}$; $M^2 = \text{Zr, Ti or Hf}$; $Cp = \text{cyclopentadienyl}$; $R^1, R^2 = \text{methyl, ethyl, i-propyl, t-butyl, halogen, phenyl, alkylphenyl, SiMe}_3$; $L = \text{bidental, doubly nitrogen-coordinated organochemical ligand, which together with metal } M^1 \text{ form a 5- or six membered ring}$). These complexes have very good catalytic activity, good useful life and require less cocatalyst.

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(57) Zusammenfassung: Die zweikernigen, sauerstoffverbrückten, hetero-bimetallischen Komplexe der allgemeinen Formel: $[(LM^1R^1)(Cp_2M^2R^2)]\mu\text{-O}$ eignen sich als Polymerisations-Katalysatoren für die Olefinpolymerisation. ($M^1 = \text{Al, Ge, Zr oder Ti}$; $M^2 = \text{Zr, Ti oder Hf}$; $Cp = \text{Cyclopentadienyl}$; $R^1, R^2 = \text{Methyl, Ethyl, i-Propyl, t-Butyl, Halogen, Phenyl, Alkylphenyl, SiMe}_3$; $L = \text{bidentaler, zweifach Stickstoff-koordinierter organochemischer Ligand, der zusammen mit dem Metall } M^1 \text{ einen 5- oder 6-Ring bildet}$). Sie zeigen sehr gute katalytische Aktivitäten, gute Standzeiten und erfordern wenig Cokatalysator.

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